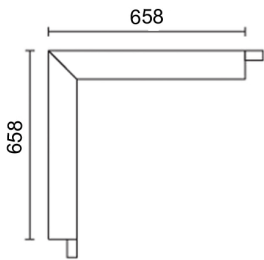


Last information update: April 2024

Product configuration: Q439

Q439: Frame Angular Module - Down Office / Working UGR < 19 - Warm LED - DALI

**Product code**

Q439: Frame Angular Module - Down Office / Working UGR < 19 - Warm LED - DALI

Technical description

Angular element for Frame version profiles with contact frame; including a Warm LED module. Microprismatic screen for controlled luminance emission UGR < 19 - 3000 cd/m² (working lighting); screen set up for connecting several lengths by overlapping. Built-in DALI dimmable control gear. Pass-through wiring for continuous lines:

Installation

Recessed using the brackets on the profile.

Colour

White (01)*

Weight (Kg)

5.1

* Colours on request

Mounting

ceiling recessed

Wiring

The angular profile is supplied with pass-through wiring for continuous lines. Quick coupling terminal blocks to simplify connections between the luminaires. LED module complete with integrated dimmable DALI control gear.

Notes

Take care when configuring the system; to complete a continuous line with an angular profile correctly, two initial modules are required, one for each side of the corner.

Complies with EN60598-1 and pertinent regulations

**Technical data**

Im system:	1800	Voltage [Vin]:	230
W system:	15.6	Lamp code:	LED
Im source:	1250	Number of lamps for optical assembly:	1
W source:	6.8	ZVEI Code:	LED
Luminous efficiency (Im/W, real value):	115.4	Number of optical assemblies:	2
Im in emergency mode:	-	Power factor:	See installation instructions
Total light flux at or above an angle of 90° [Lm]:	0	Inrush current:	18 A / 250 µs
Light Output Ratio (L.O.R.) [%]:	72	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 21 luminaires B16A: 34 luminaires C10A: 35 luminaires C16A: 57 luminaires
CRI (minimum):	80	Minimum dimming %:	1
Colour temperature [K]:	3000	Overvoltage protection:	2kV Common mode & 1kV Differential mode
MacAdam Step:	3	Control:	DALI-2
Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)		

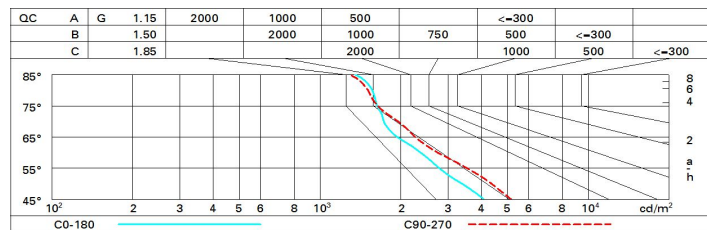
Polar

		CIE nL 0.72 66-90-98-100-72 UGR 17.4-17.7 DIN A.51 UTE 0.72C+0.00T F*1=662 F*1+F*2=902 F*1+F*2+F*3=980 CIBSE LG3 L<3000 cd/m ² at 65° UGR<19 L<3000 cd/mq @ 65°		Lux h d1 d2 Em Emax 1 1.3 1.6 391 562 2 2.7 3.2 98 141 3 4 4.9 43 62 4 5.4 6.5 24 35		
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Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	54	47	43	40	47	43	42	38	53
1.0	58	52	48	45	51	48	47	43	60
1.5	64	60	56	53	59	56	55	51	71
2.0	68	64	61	59	63	61	60	56	78
2.5	70	67	65	63	66	64	63	60	83
3.0	71	69	67	65	68	66	65	62	86
4.0	73	71	70	68	70	68	67	64	89
5.0	74	72	71	70	71	70	69	66	91

Luminance curve limit



UGR diagram

Corrected UGR values (at 1250 lm bare lamp luminous flux)											
Reflect.: ceiling walls work pl. Room dim x y		viewed crosswise					viewed endwise				
		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
2H	2H	15.1	16.1	15.4	16.3	16.6	16.2	17.2	16.5	17.4	17.7
	3H	15.8	16.7	16.2	17.0	17.3	16.4	17.3	16.8	17.6	17.9
	4H	16.2	17.0	16.5	17.3	17.6	16.5	17.3	16.8	17.6	17.9
	6H	16.5	17.2	16.8	17.6	17.9	16.4	17.2	16.8	17.5	17.9
	8H	16.6	17.3	17.0	17.6	18.0	16.4	17.1	16.8	17.5	17.8
	12H	16.6	17.3	17.0	17.7	18.0	16.4	17.1	16.8	17.4	17.8
4H	2H	15.5	16.4	15.9	16.7	17.0	17.1	17.9	17.4	18.2	18.5
	3H	16.4	17.1	16.8	17.5	17.8	17.5	18.1	17.8	18.5	18.9
	4H	16.8	17.5	17.3	17.8	18.2	17.6	18.2	18.0	18.6	19.0
	6H	17.3	17.8	17.7	18.2	18.6	17.7	18.2	18.1	18.6	19.0
	8H	17.4	17.9	17.8	18.3	18.8	17.7	18.2	18.1	18.6	19.0
	12H	17.5	17.9	18.0	18.4	18.8	17.7	18.1	18.1	18.6	19.0
8H	4H	17.0	17.5	17.4	17.9	18.4	18.0	18.5	18.4	18.9	19.3
	6H	17.5	18.0	18.0	18.4	18.9	18.2	18.6	18.7	19.0	19.5
	8H	17.8	18.1	18.3	18.6	19.1	18.3	18.6	18.8	19.1	19.6
	12H	17.9	18.2	18.4	18.7	19.3	18.3	18.6	18.8	19.1	19.7
12H	4H	17.0	17.5	17.5	17.9	18.3	18.0	18.5	18.5	18.9	19.4
	6H	17.6	17.9	18.1	18.4	18.9	18.3	18.6	18.8	19.1	19.6
	8H	17.8	18.2	18.4	18.6	19.2	18.4	18.7	18.9	19.2	19.7
Variations with the observer position at spacing:											
S =	1.0H	0.4 / -0.5					0.3 / -0.4				
	1.5H	0.5 / -1.0					0.7 / -1.2				
	2.0H	1.1 / -1.4					1.6 / -1.6				